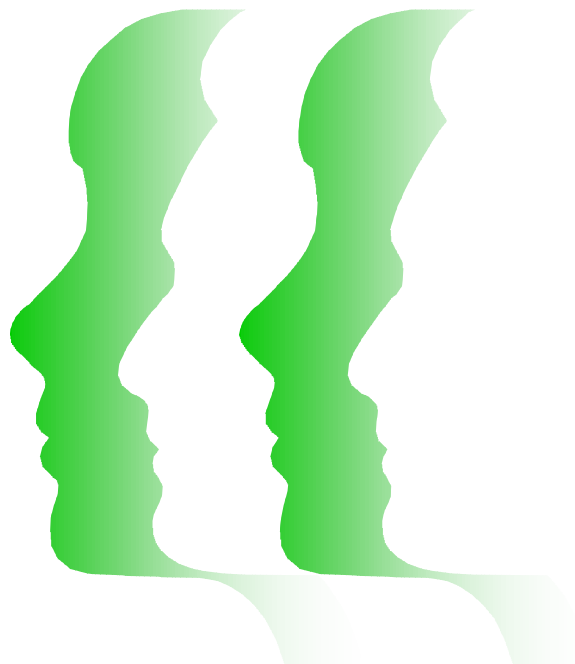


COMMUNICATING

HEALTH RISKS

WORKING SAFELY
WITH BERYLLIUM



Training Reference for
Beryllium Workers and
Managers/Supervisors

Facilitator Manual
May 1998

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Facilitator Manual

Maria T. Pavlova, M.D., Ph.D.
Paul Wambach, CIH
Don W. Harvey, CIH

Oak Ridge Institute for Science and Education Project Team:

Lisa Carroll
Ron Edmond
Deborah McFalls
Freddy Gray

May 1998

DOE Sponsoring Offices:

Office of Occupational Medicine and Medical Surveillance, EH-61
Assistant Secretary for Environment, Safety and Health
U.S. Department of Energy

Office of Technical and Environmental Support, DP-45
Assistant Secretary for Defense Programs
U.S. Department of Energy

Office of Program Integration, EM-43
Assistant Secretary for Environmental Management
U.S. Department of Energy



COMMUNICATING HEALTH RISKS: WORKING SAFELY WITH BERYLLIUM

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ACRONYMS

There are a lot of acronyms used throughout this manual. This reference guide will help you to remember what those acronyms mean.

ACGIH	American Conference of Governmental Industrial Hygienists
BAL	Bronchoalveolar Lavage
BWP	Beryllium Work Plan
CBD	Chronic Beryllium Disease
CBDPP	Chronic Beryllium Disease Prevention Program
D&D	Decontamination and Decommissioning
DOE	Department of Energy
EPA	Environmental Protection Agency
ES&H	Environment, Safety, and Health
HEPA	High Efficiency Particulate Air
IARC	International Agency for Research on Cancer
LPT	Lymphocyte Proliferation Test
MSDS	Material Safety Data Sheet
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PPE	Personal Protective Equipment
R&D	Research and Development
TLV	Threshold Limit Value

UNITS OF MEASURE

cm ²	Square centimeter
m ²	Square meter
m ³	Cubic meter
µg	Microgram



The materials in this manual were prepared through the collaborative work of many individuals and organizations. The project is the first task in a larger effort to improve the effectiveness of the U.S. Department of Energy's (DOE) communications to workers about health risks they may encounter in the workplace. This effort has been led since June 1997 by the Office of Occupational Medicine and Medical Surveillance (EH-61), Assistant Secretary for Environment, Safety and Health, in partnership with the Office of Technical and Environmental Support (DP-45), Assistant Secretary for Defense Programs. In December 1997, the Environmental Restoration Office of Program Integration (EM-43), Assistant Secretary for Environmental Management, joined the project sponsors.

The project has brought together a diverse group of DOE employees and other individuals concerned with the need for consistent, effective messages in dialogs on health risks, and specifically on the risks of occupational exposure to beryllium. DOE community members of the task force include workers with chronic beryllium disease, workers currently employed in beryllium operations, union representatives, line managers, site occupational medicine doctors, site industrial hygienists, site trainers, epidemiologists, and toxicologists. DOE operations and program office personnel with responsibilities for oversight of safety and health in DOE facilities have also participated. Other task force members include environment, safety, and health staff from Brush Wellman, Inc.; and communication, health, and medical specialists from the National Institute for Occupational Safety and Health, National Cancer Institute, Agency for Toxic Substances and Disease Registry, research institutes, and several universities. In preparation for the training pilot at the Y-12 Plant, Lockheed Martin Energy Systems trainers and line managers conducted a careful review of the materials. (Task Force members are listed at the end of the Foreword.)

The materials presented here represent the group's effort to integrate up-to-date, technically accurate information about beryllium, presented in lay language, with a structure defined by risk communication "best practices." The project team wishes to thank all the task force members who gave their time, creativity, and expertise to this project by contributing data and perspectives and by reading and reviewing the materials at various stages of their development.

BERYLLIUM HEALTH RISK COMMUNICATION TASK FORCE MEMBERS, 1997-1998

Mr. Steve Abeln, Los Alamos National Laboratory
Mr. Fred Alagarra, Los Alamos National Laboratory
Ms. Kristin Baksa, Lockheed Martin Energy Systems, Inc.
Dr. Scott Bartell, Consortium for Risk Evaluation with Stakeholder Participation, University of Washington
Dr. Mary Benton, Lockheed Martin Energy Systems, Inc., Centers for Continuing Education
Dr. Eula Bingham, Department of Environmental Health, University of Cincinnati
Mr. Glenn Bell, Lockheed Martin Energy Systems, Inc.
Mr. Raul Brunner, Los Alamos National Laboratory
Ms. Lisa Carroll, Oak Ridge Institute for Science and Education
Dr. Caron Chess, Center for Environmental Communication, Cook College-Rutgers University
Dr. Donna Cragle, Center for Epidemiologic Research, Oak Ridge Institute for Science and Education
Ms. Kathryn Creek, Los Alamos National Laboratory
Mr. Ron Edmond, Oak Ridge Institute for Science and Education
Dr. Greg Finch, Lovelace Respiratory Research Institute



Mr. Fred Donateo, National Cancer Institute, National Institutes of Health

Mr. Norman Ford, Lockheed Martin Energy Systems, Inc., Centers for Continuing Education
Mr. Tom Ford, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Mr. Gary Foster, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Mr. William Frede, AlliedSignal Aerospace Kansas City Plant
Ms. Joan Friedland, National Institute for Occupational Safety and Health
Dr. Howard Friedman, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Mr. George Fulton, Lawrence Livermore National Laboratory
Dr. Joseph Furman, DynCorp of Colorado, Inc., Rocky Flats Environmental Technology Site
Ms. Susan Gilliam, Lockheed Martin Energy Systems, Inc., Centers for Continuing Education
Mr. Freddy Gray, Oak Ridge Institute for Science and Education
Mr. Don Harvey, Defense Programs Office of Technical and Environmental Support, U.S. Department of Energy
Ms. Barbara Hargis, Los Alamos National Laboratory
Ms. Linda Henry, Mason & Hanger - Pantex Plant
Dr. Duane Hilmas, DynCorp of Colorado, Inc., Rocky Flats Environmental Technology Site
Mr. Ralph Hinterman, Argonne National Laboratory
Dr. Rebecca Hollis, Los Alamos National Laboratory
Dr. Mark Hoover, Lovelace Respiratory Research Institute
Ms. Michelle Hoover, Agency for Toxic Substances and Disease Registry
Mr. Michael Jackson, Safe Sites of Colorado, Rocky Flats Environmental Technology Site
Mr. Alan Janssen, National Institute for Occupational Safety and Health
Mr. Jim Jenkins, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Mr. Darryll Johnson, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Dr. Otis Jones, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Mr. Gerald Kassalow, Environmental Management Office of Program Integration, U.S. Department of Energy
Mr. Marc Kolanz, Brush Wellman, Inc.
Dr. Ralph Lightner, Environmental Management Office of Southwest Programs, U.S. Department of Energy
Ms. Ann Lubenow, National Cancer Institute, National Institutes of Health
Mr. Paul Maples, Lockheed Martin Energy Systems, Inc., Centers for Continuing Education
Ms. Deborah McFalls, Oak Ridge Institute for Science and Education
Mr. Burlin McKinney, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Dr. Margaret Mroz, National Jewish Medical and Research Center
Dr. Lee S. Newman, National Jewish Medical and Research Center
Mr. Rob Nicholas, Los Alamos National Laboratory
Mr. Charles A. Oslin, Argonne National Laboratory
Dr. Maria Pavlova, Environment, Safety and Health Office of Occupational Medicine and Medical Surveillance, U.S. Department of Energy
Mr. Bill Rogerson, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Mr. John Rothrock, Oak Ridge Operations Office, U.S. Department of Energy
Mr. Lorry Ruth, Lockheed Martin Energy Systems, Inc., Y-12 Plant
Dr. Bill Schleyer, Lovelace Respiratory Research Institute
Dr. Hugh Smith, Los Alamos National Laboratory
Mr. James Slawski, Defense Programs Office of Technical and Environmental Support, U.S. Department of Energy



Dr. Arthur Stange, DynCorp of Colorado, Inc., Rocky Flats Environmental Technology Site

Mr. Rich Stone, Battelle, Pantex Plant

Dr. Tim Takaro, Consortium for Risk Evaluation with Stakeholder Participation, University of Washington

Mr. Bill Tankersley, Center for Epidemiologic Research, Oak Ridge Institute for Science and Education

Mr. Ted Tegeler, United Steelworkers of America, Local 8031, Rocky Flats Environmental Technology Site

Ms. Leslie Thurman, Brush Wellman, Inc.

Dr. Tim Tinker, Agency for Toxic Substances and Disease Registry

Ms. Julie Tisdale, National Institute for Occupational Safety and Health

Mr. Alan Trivette, Oak Ridge Operations Office, U.S. Department of Energy

Mr. Paul Wambach, Environment, Safety and Health Office of Occupational Medicine and Medical Surveillance, U.S. Department of Energy

Mr. David Weitzman, Environment, Safety and Health, Office of Occupational Safety and Health Policy, U.S. Department of Energy

Mr. Greg Zigulis, M.K. Ferguson of Oak Ridge Company

If you have questions or suggestions for future modifications to this material or on the risk communication project, please call or e-mail Dr. Maria Pavlova, EH-61, DOE, at 301-903-3658 (maria.pavlova@eh.doe.gov), or Lisa Carroll, Oak Ridge Institute for Science and Education, 423-576-2266 (carrolle@ornl.gov).